

Application No. 09/382,433

58. (New) The ambulatory orthosis of claim 50 wherein the sensor comprises a position sensor connected to a hinge.

59. (New) The ambulatory orthosis of claim 50 wherein the orthosis comprises a hinge.

REMARKS

Claims 24-31 and 50 are pending. The Examiner improperly withdrew claim 50 from consideration, as described in the comments on the Restriction below. By this Amendment, claim 50 is amended, and new claims 51-59 are added. Claim 50 is amended for clarity. Applicants do not intend to narrow claim 50 by the amendment.

New claim 51 is supported by the specification, for example, at page 40, line 32 to page 41, line 8. New claims 52 and 53 are supported by the specification, for example, at page 43, lines 9-27. New claims 54, 55 and 59 are supported by the specification, for example, at page 20, lines 14-25. New claim 56 is supported by the specification, for example, at page 58, line 29 to page 59, line 9. New claim 57 is supported by the specification, for example, at page 27, lines 1-2. New claim 58 is supported by the specification, for example, at page 32, lines 22-26. No new matter is introduced by the amendment of claim 50 or by new claims 51-59.

Restriction

In a response dated June 18, 2002, Applicants elected Group II claim 50 with traverse. This confirmed an oral election of June 3, 2002. However, the Examiner nevertheless withdrew claim 50 from consideration and examined claims 24-31. Applicants believe that this Examiner error was inappropriate, and that claim 50 should be examined.

The issues relating to the rejection of claims 24-31 are addressed below. These issues are straightforward such that the patentability of claims 24-31 is clarified below.

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In view of the Examiner's error, claim 50 should be examined along with claims 24-31 since Applicants elected claim 50 not claims 24-31 and since the patentability of claims 24-31 is resolved.

Rejection Under 35 U.S.C. § 103

The Examiner's statement of the rejection was incomplete and, specifically, did not indicate what art was used in the rejection. Based on the citation of paragraphs 6 of papers 8 and 11 [sic 12?], Applicants have guessed that the rejection is over U.S. Patent 4,556,216 to Pitkanen (the Pitkanen patent). Based on this assumption, the Examiner rejected claims 24-31 under 35 U.S.C. § 103(a) as being obvious over the Pitkanen patent. The Examiner bases this rejection on "reasonably broad interpretation" of the term "ambulatory." Applicants maintain that the Examiner has failed to establish prima facie obviousness since the Examiner completely ignores one feature of the claimed method. Applicants respectfully request reconsideration of the rejection based on the following comments.

The Examiner asserts that the Pitkanen patent discloses an ambulatory orthosis by virtue of the device moving about a hinge during the flexing step. Even assuming arguendo that the Examiner's interpretation is reasonable, it ignores another portion of the claim such that prima facie obviousness is still not established. Claim 24 also recites that "the ambulatory orthosis is carried by the patient during the flexing step." According to paragraph 6 of paper 12 (Office Action of August 24, 2001), the roller of the Pitkanen device is asserted to be the ambulatory orthosis. As noted by the Examiner, the roller pivots on a hinge. If the roller pivots on the hinge, the hinge clearly supports the roller. The hinge of the Pitkanen device clearly is supported by the ground through various structures disclosed in the Pitkanen patent. The roller is clearly not carried by the Patient during the flexing step. Therefore, the Examiner's arguments ignore one aspect of the claimed method.

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Since the Examiner has completely ignored one aspect of the claimed invention, the Examiner has not even asserted a prima facie case of obviousness. Furthermore, the devices disclosed in the Pitkanen patent are specifically designed to counter muscle groups of the patient against each other. See throughout. All of the figures in the Pitkanen patent involve the simultaneous use of two limbs working against each other. There is no suggestion on how this use of symmetrical muscle groups (column 2, lines 3-7) can be accomplished with an ambulatory device as claimed by Applicants. Thus, the Pitkanen patent does not come close to rendering Applicants' claimed invention obvious.

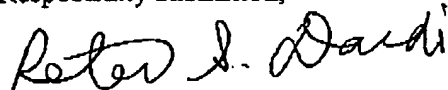
In addition to the Examiner failing to assert a proper case of prima facie obviousness of claim 24, the Examiner has addressed **no features** of the dependent claims. Applicants respectfully request withdrawal of the rejection of claims 24-31 under 35 U.S.C. § 103(a) as being obvious over the Pitkanen patent.

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



Peter S. Dardi, Ph.D.
Registration No. 39,650

Customer No. 24113
Patterson, Thuent, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100

Application No. 09/382,433

Telephone: (612) 349-5746

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office, Fax No. 703-872-9302 on the date shown below thereby constituting filing of same.

January 23, 2003

Date

Shari R. Thorndike
Shari R. Thorndike

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ATTACHMENT

REDLINED AMENDMENT

Claims As Amended

Claim 50 has been amended as follows:

50. (Three Times Amended) An ambulatory orthosis system, the ambulatory orthosis system comprising:

a display,

a support portion that fits around a joint and is carried by the patient during activities and a sensor on the support portion, and

a controller operably connected to the sensor, wherein the controller controls the display based on signals from the sensor, and

wherein the patient, flexing the joint, causes a cursor movement on the display, [the cursor reaching a target position on the display at a selected, predetermined time,]in which the motion of the cursor is correlated with motion or strain of the joint as detected by the sensor in the ambulatory orthosis system support when the ambulatory orthosis support is associated with the joint of the patient.

New claims 51-59 have been added as follows:

--51. (New) The ambulatory orthosis system of claim 50 wherein the controller is portable and comprises a digital microprocessor.

52. (New) The ambulatory orthosis system of claim 51 wherein the display is integral with the portable controller.

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53. (New) The ambulatory orthosis system of claim 50 wherein the display is part of a television.
54. (New) The ambulatory orthosis of claim 50 wherein the support portion fits around a patient's knee.
55. (New) The ambulatory orthosis of claim 50 wherein the support portion fits around a patient's elbow.
56. (New) The ambulatory orthosis of claim 50 wherein the display provides a target to be reached by the patient through their movement of the joint.
57. (New) The ambulatory orthosis of claim 50 wherein the sensor comprises a strain sensor.
58. (New) The ambulatory orthosis of claim 50 wherein the sensor comprises a position sensor connected to a hinge.
59. (New) The ambulatory orthosis of claim 50 wherein the orthosis comprises a hinge.—